

ABSTRACT OF THE DISCLOSURE

The present invention provides a vertebrate translation initiation factor (eIF-4AIII), that plays a role in the differentiation of an embryonic cell to an epidermal cell. This translation initiation factor interacts with BMP-4 in a positive regulatory loop. The

5 nucleic acid and amino acid sequences are also disclosed. Also disclosed are methods of using the translation initiation factor, nucleic acids encoding the same, and corresponding antibodies and the like.